

PATENT  
Atty Dkt No.: FNSR/1001.02  
Express Mail No. EV335470555US

## CLAIMS:

1. A method for determining network topology, comprising:  
capturing and storing channelized data with a network analyzer;  
interleaving the channelized data into a unitary data stream in chronological  
order; and  
processing the unitary data stream to extrapolate indicators of network  
elements. (i.e. switches)

2. The method of claim 1, wherein processing the unitary data stream further  
comprises determining a left and right topology from the network analyzer.

3. The method of claim 2, further comprising analyzing ordered sets, source and  
destination IDs, and ordering of events in the unitary data trace to determine the  
presence of network elements.

4. The method of claim 3, further comprising analyzing open and close  
commands in the unitary data trace to determine the presence of a loop.

5. The method of claim 3, further comprising analyzing device addresses in the  
unitary data trace to determine the presence of switches.

6. The method of claim 3, further comprising analyzing ordering of events in the  
unitary data trace to determine the presence of stealth mode switches.

7. A method for determining network topology during a network analysis  
process, comprising:

positioning at least one network analyzer in communication with the network;

capturing trace data from a first and second channel on each of the  
analyzers;

Check this

PATENT  
Atty Dkt No.: FNSR/1001.02  
Express Mail No. EV335470555US

determining a first topology corresponding to the first channel of each <sup>3.</sup> analyzer; *said*

determining a second topology corresponding to the second channel of each analyzer; *said*

combining the first and second topologies from each of the analyzers; and  
deleting duplicate topology entries from the combined topology to generate  
the network topology.

8. The method of claim 7, wherein positioning the at least one network analyzer  
further comprises positioning the analyzers such that bidirectional communication  
between each network element may be captured in a data trace. *check this protocol*

9. The method of claim 7, wherein capturing trace data further comprises storing  
channelized data for subsequent processing. *He*

10. The method of claim 7, wherein determining the first and second topology  
comprises analyzing ordered sets, source and destination identifications, device  
addresses, and ordering of events in the trace data to determine the presence of  
network elements that correspond to the ordered sets, source and destination  
identifications, and device addresses. *[0240] [0161]*

11. The method of claim 10, further comprising analyzing open and close  
commands in the trace data to determine the presence of a loop on the network. *g*

12. The method of claim 10, further comprising analyzing device addresses in the  
trace data to determine the presence of switches on the network. *the*

13. The method of claim 10, further comprising analyzing ordering of events in  
the trace data to determine the presence of stealth mode switches on the network. *the*

## PATENT

Atty Dkt No.: FNSR/1001.02

Express Mail No. EV335470555US

14. The method of claim 7, further comprising displaying the network topology to a user via a graphical user interface.

7/15. A method for analyzing a network to determine the topology of the network, comprising:

Claim 15 positioning at least one analyzer in communication with the network;  
capturing a left channel and a right channel data trace from each of the at least one analyzers; (Abstract) Ike da

Claim 16 extrapolating network device presence indicators from the left and right channel data; and (copy) Edmundo Check

Claim 17 determining the network topology from the network device indicators; and displaying the determined network topology to a user. (copy) Edmundo

16. The method of claim 15, further comprising combining the left and right channel data into a unitary data stream. (2) Feola (0055)

17. The method of claim 16, wherein determining the network topology comprises determining a left topology and a right topology for each of the at least one analyzers and combining the left and right topologies to determine an overall topology. (Abstract) (2) the Check

18. The method of claim 15, wherein determining the network topology comprises analyzing ordered sets, source and destination identifications, device addresses, and ordering of events in the data trace to determine the presence of network devices that correspond to the ordered sets, source and destination identifications, and device addresses. (copy) Edmundo

19. The method of claim 18, wherein the ordered sets are analyzed to determine the presence of loops on the network. (3) the Check (4)

15, 17, 18, 21

PATENT  
Atty Dkt No.: FNSR/1001.02  
Express Mail No. EV335470555US

20. The method of claim 18, wherein the device addresses are analyzed to determine the presence of switches on the network.

21. The method of claim 18, wherein ordering of events is analyzed to determine the presence of stealth mode switches on the network.